

```
SSSSSSSSSSSSSS 000000000 000 RRRRRRRRRRRR TTTTTTTTTTTTTTTT 333333333 222222222
SSSSSSSSSSSSSS 000000000 000 RRRRRRRRRRRR TTTTTTTTTTTTTTTT 333333333 222222222
SSSSSSSSSSSSSS 000000000 000 RRRRRRRRRRRR TTTTTTTTTTTTTTTT 333333333 222222222
SSS 000 000 RRR RRR 333 333 222 222
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SSSSSSSSSS 000 000 RRRRRRRRRRRR TTT TTT 333 333 222 222
SSSSSSSSSS 000 000 RRRRRRRRRRRR TTT TTT 333 333 222 222
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SSSSSSSSSSSS 000000000 000 RRR RRR TTT TTT 333333333 2222222222222222
SSSSSSSSSSSS 000000000 000 RRR RRR TTT TTT 333333333 2222222222222222
SSSSSSSSSSSS 000000000 000 RRR RRR TTT TTT 333333333 2222222222222222
```

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SSSSSSSS 000000 RRRRRRRR TTTTTTTTTT MM MM EEEEEEEEE RRRRRRRR GGGGGGGG EEEEEEEEE
SSSSSSSS 000000 RRRRRRRR TTTTTTTTTT MM MM EEEEEEEEE RRRRRRRR GGGGGGGG EEEEEEEEE
SS      00      00 RR      RR TT      MM MM EEEEEEEEE RR      RR GG      EE
SS      00      00 RR      RR TT      MM MM EEEEEEEEE RR      RR GG      EE
SS      00      00 RR      RR TT      MM MM EEEEEEEEE RR      RR GG      EE
SSSSSS 00      00 RRRRRRRR TT      MM MM EEEEEEEEE RRRRRRRR GG      EE
SSSSSS 00      00 RRRRRRRR TT      MM MM EEEEEEEEE RRRRRRRR GG      EE
SS      00      00 RR      RR TT      MM MM EEEEEEEEE RR      RR GG      EE
SS      00      00 RR      RR TT      MM MM EEEEEEEEE RR      RR GG      EE
SS      00      00 RR      RR TT      MM MM EEEEEEEEE RR      RR GG      EE
SSSSSSSS 000000 RR      RR TT      MM MM EEEEEEEEE RR      RR GG      EE
SSSSSSSS 000000 RR      RR TT      MM MM EEEEEEEEE RR      RR GG      EE

MM MM AAAA PP PPPPPP
MM MM AAAA PP PPPPPP
MMM MMM AA AA PP PP
MMM MMM AA AA PP PP
MM MM AA AA PP PP
MM MM AA AA PPPPPPP
MM MM AA AA PPPPPPP
MM MM AAAAAAAAAA PP
MM MM AAAAAAAAAA PP
MM MM AA AA PP
MM MM AA AA PP
MM MM AA AA PP
MM MM AA AA PP
```

+-----+  
! Object Module Synopsis !  
+-----+

Module Name	Ident	Bytes	File	Creation Date	Creator
-----	-----	-----	-----	-----	-----
SORTSHR	V04-000	0	[SORT32.OBJ]SORTSHR.EXE;1	16-SEP-1984 04:16	VAX-11 Linker V04-00
LIBRTL	V04-000	0	\$_255\$DUA28:[SYSLIB]LIBRTL.EXE;1	16-SEP-1984 04:00	VAX-11 Linker V04-00
SOR\$ENTRY	V04-000	1312	[SORT32.OBJ]SORTMERGE.OLB;1	16-Sep-1984 00:23	VAX-11 Bliss-32 V4.0-742
SOR\$COMMAND	V04-000	3753	[SORT32.OBJ]SORTMERGE.OLB;1	16-Sep-1984 00:45	VAX-11 Bliss-32 V4.0-742
UTIL\$CHK_CLI	V04-000	2145	[SORT32.OBJ]SORTMERGE.OLB;1	16-Sep-1984 00:48	VAX-11 Bliss-32 V4.0-742
SOR\$OUTPUT	V04-000	163	[SORT32.OBJ]SORTMERGE.OLB;1	16-SEP-1984 01:18	VAX/VMS Macro V04-00
LIB\$FIXUP_DEC	V04-000	788	[SORT32.OBJ]SORTMERGE.OLB;1	16-SEP-1984 01:19	VAX/VMS Macro V04-00
CLI\$INTERFACE	V04-000	516	\$_255\$DUA28:[SYSLIB]STARLET.OLB;2	16-Sep-1984 00:32	VAX-11 Bliss-32 V4.0-742
CLI\$GLOBALS	V04-000	0	\$_255\$DUA28:[SYSLIB]STARLET.OLB;2	15-SEP-1984 23:38	VAX/VMS Macro V04-00
LIB\$MSGDEF	2-018	0	\$_255\$DUA28:[SYSLIB]STARLET.OLB;2	15-SEP-1984 23:43	VAX-11 Message V04-00
SYSSP1_VECTOR	V04-000	0	\$_255\$DUA28:[SYSLIB]STARLET.OLB;2	16-SEP-1984 00:40	VAX/VMS Macro V04-00

Sym

CAS

CC\$

CDD

CDD

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COM

COM

CRE

DFS

ECS

FUN

GCC

GFS

GKT

GNS

GOC

GSS

GSS

IC1

LIB

LIB

LIB

LIB

LIB

LIB



+-----+  
! Program Section Synopsis !  
+-----+

Psect Name	Module Name	Base	End	Length	Align	Attributes
SCODES		00000200	00001743	00001544 (	5444.)	LONG 2 PIC,USR,CON,REL,GBL, SHR, EXE, RD,NOWRT,NOVEC
	SOR\$ENTRY	00000200	000004A0	000002A1 (	673.)	LONG 2
	SOR\$COMMAND	000004A4	00000E67	000009C4 (	2500.)	LONG 2
	UTIL\$CHK_CLI	00000E68	0000153F	000006D8 (	1752.)	LONG 2
	CLIS\$INTERFACE	00001540	00001743	00000204 (	516.)	LONG 2
\$PLITS		00001744	00001E8B	00000748 (	1864.)	LONG 2 PIC,USR,CON,REL,GBL, SHR, EXE, RD,NOWRT,NOVEC
	SOR\$ENTRY	00001744	0000197A	00000237 (	567.)	LONG 2
	SOR\$COMMAND	0000197C	00001E1F	000004A4 (	1188.)	LONG 2
	UTIL\$CHK_CLI	00001E20	00001E8B	0000006C (	108.)	LONG 2
SOR\$RO_CODE		00001E8C	00001F2E	000000A3 (	163.)	LONG 2 PIC,USR,CON,REL,GBL, SHR, EXE, RD,NOWRT,NOVEC
	SOR\$OUTPUT	00001E8C	00001F2E	000000A3 (	163.)	LONG 2
_LIB\$CODE		00001F30	00002243	00000314 (	788.)	LONG 2 PIC,USR,CON,REL,GBL, SHR, EXE, RD,NOWRT,NOVEC
	LIB\$FIXUP_DEC	00001F30	00002243	00000314 (	788.)	LONG 2
\$OWNS		00002400	000025A8	000001A9 (	425.)	LONG 2 NOPIC,USR,CON,REL,LCL,NOSHR,NOEXE, RD, WRT,NOVEC
	SOR\$ENTRY	00002400	00002447	00000048 (	72.)	LONG 2
	SOR\$COMMAND	00002448	00002488	00000041 (	65.)	LONG 2
	UTIL\$CHK_CLI	0000248C	000025A8	0000011D (	285.)	LONG 2

+-----+  
! Symbol Cross Reference !  
+-----+

Symbol	Value	Defined By	Referenced By ...
CHK\$CHKPNT	00000000		WK-UTIL\$CHK_CLI
CHK\$CRECHK	00000000		WK-UTIL\$CHK_CLI
CHK\$ NOTINIT	00000000		WK-UTIL\$CHK_CLI
CLISDCL_PARSE	0000160F-R	CLIS\$INTERFACE	
CLISDISPATCH	000016C0-R	CLIS\$INTERFACE	
CLISGET_VALUE	00001583-R	CLIS\$INTERFACE	SOR\$COMMAND
CLISNEXT_QUAL	00001701-R	CLIS\$INTERFACE	SOR\$COMMAND
CLISPRESENT	00001540-R	CLIS\$INTERFACE	SOR\$COMMAND
CLIS_ABSENT	000381F0	CLIS\$GLOBALS	UTIL\$CHK_CLI
CLIS_COMMA	0003FD39	CLIS\$GLOBALS	UTIL\$CHK_CLI
CLIS_CONCAT	0003FD29	CLIS\$GLOBALS	UTIL\$CHK_CLI
CLIS_DEFAULTED	0003FD21	CLIS\$GLOBALS	UTIL\$CHK_CLI
CLIS_FACILITY	00000003	CLIS\$GLOBALS	UTIL\$CHK_CLI
CLIS_INVQUAL	0003880A	CLIS\$GLOBALS	SOR\$COMMAND
CLIS_INVREQTYP	00038822	CLIS\$GLOBALS	UTIL\$CHK_CLI
CLIS_IVCHAR	00038050	CLIS\$GLOBALS	SOR\$COMMAND
CLIS_IVVALU	00038088	CLIS\$GLOBALS	SOR\$COMMAND
CLIS_LOCNeg	00038230	CLIS\$GLOBALS	CLIS\$INTERFACE
CLIS_LOCPRES	0003FD31	CLIS\$GLOBALS	CLIS\$INTERFACE
CLIS_NEGATED	000381F8	CLIS\$GLOBALS	CLIS\$INTERFACE
CLIS_NOCOMD	000380B0	CLIS\$GLOBALS	CLIS\$INTERFACE
CLIS_PRESENT	0003FD19	CLIS\$GLOBALS	CLIS\$INTERFACE
CLIS_SPAWNED	0003FD01	CLIS\$GLOBALS	UTIL\$CHK_CLI
CLIS_VALCNVERR	00038832	CLIS\$GLOBALS	SOR\$COMMAND
CLI_BEGIN	00000E68-R	UTIL\$CHK_CLI	
CLI_END	00000EA1-R	UTIL\$CHK_CLI	
CLI_GET_VALUE	00000ECD-R	UTIL\$CHK_CLI	
CLI_NEXT_QUAL	00001093-R	UTIL\$CHK_CLI	
CLI_PRESENT	00000FB8-R	UTIL\$CHK_CLI	
LIB\$FIXUP_DEC	00001F51-R	LIB\$FIXUP_DEC	SOR\$ENTRY
LIB\$FIXUP_FLT	00002688-RX	LIBRTL	SOR\$ENTRY
LIB\$FREE_VM	00002674-RX	LIBRTL	CLIS\$INTERFACE
LIB\$GET_VM	00002678-RX	LIBRTL	CLIS\$INTERFACE
LIB\$SIGNAL	00002684-RX	LIBRTL	SOR\$COMMAND
LIB\$SYS TRNLOG	0000267C-RX	LIBRTL	UTIL\$CHK_CLI
LIB\$BADSTA	00158204	LIB\$MSGDEF	LIB\$FIXUP_DEC
PRINT_STATS	00000390-R	SOR\$ENTRY	
SOR\$COMMAND	000004B7-R	SOR\$COMMAND	SOR\$ENTRY
SOR\$OUTPUT	00001E8E-R	SOR\$OUTPUT	SOR\$ENTRY
SOR\$BEGIN_MERGE	00002648-RX	SORTSHR	SOR\$COMMAND
SOR\$BEGIN_SORT	0000264C-RX	SORTSHR	SOR\$COMMAND
SOR\$END_SORT	0000265C-RX	SORTSHR	SOR\$ENTRY
SOR\$ENTRY	000002B1-R	SOR\$ENTRY	
SOR\$GK_ADDRESS	00000004	SORTSHR	SOR\$COMMAND
SOR\$GK_INDEX	00000003	SORTSHR	SOR\$COMMAND
SOR\$GK_RECORD	00000001	SORTSHR	SOR\$COMMAND
SOR\$GK_TAG	00000002	SORTSHR	SOR\$COMMAND
SOR\$K_IDENT	00000000	SORTSHR	SOR\$ENTRY
SOR\$K_INI_RUNS	00000008	SORTSHR	SOR\$ENTRY

Symbol	Value	Defined By	Referenced By ...
SORSK_LRL_INP	00000004	SORTSHR	SOR\$ENTRY
SORSK_LRL_INT	00000005	SORTSHR	SOR\$ENTRY
SORSK_LRL_OUT	00000006	SORTSHR	SOR\$ENTRY
SORSK_MRG_ORDER	00000009	SORTSHR	SOR\$ENTRY
SORSK_MRG_PASSES	0000000A	SORTSHR	SOR\$ENTRY
SORSK_NODES	00000007	SORTSHR	SOR\$ENTRY
SORSK_REC_INP	00000001	SORTSHR	SOR\$ENTRY
SORSK_REC_OUT	00000003	SORTSHR	SOR\$ENTRY
SORSK_REC_SOR	00000002	SORTSHR	SOR\$ENTRY
SORSK_WRK_ALQ	0000000B	SORTSHR	SOR\$ENTRY
SORS\$EBCDIC	00000002	SORTSHR	SOR\$COMMAND
SORS\$LOAD_FILL	00000200	SORTSHR	SOR\$COMMAND
SORS\$MULTI	00000004	SORTSHR	SOR\$COMMAND
SORS\$NODUPS	00000040	SORTSHR	SOR\$COMMAND
SORS\$SEQ_CHECK	00000010	SORTSHR	SOR\$COMMAND
SORS\$STABLE	00000001	SORTSHR	SOR\$COMMAND
SORS\$PASS_FILES	00002650-RX	SORTSHR	SOR\$COMMAND
SORS\$SORT_MERGE	00002660-RX	SORTSHR	SOR\$ENTRY
SORS\$SPEC_FILE	00002654-RX	SORTSHR	SOR\$COMMAND
SORS\$STAT	00002658-RX	SORTSHR	SOR\$ENTRY
SORS\$ROPRAND	001C8142	SORTSHR	SOR\$ENTRY
SORT\$FACILITY	0000001C	SORTSHR	SOR\$ENTRY
STR\$ANALYZE_SDESC	00002670-RX	LIBRTL	CLIS\$INTERFACE
STR\$COPY_DX	0000266C-RX	LIBRTL	CLIS\$INTERFACE
STR\$COPY_R	00002680-RX	LIBRTL	SOR\$COMMAND
SYSS\$CALL_HANDL	80000010	SYSS\$P1_VECTOR	LIB\$FIXUP_DEC
SYSS\$CLI	7FFFEDE18	SYSS\$P1_VECTOR	CLIS\$INTERFACE
SYSS\$CREMBX	7FFFEDEB8	SYSS\$P1_VECTOR	UTIL\$CHK_CLI
SYSS\$CREPRC	7FFFEDEC0	SYSS\$P1_VECTOR	UTIL\$CHK_CLI
SYSS\$DASSGN	7FFFEDEE0	SYSS\$P1_VECTOR	UTIL\$CHK_CLI
SYSS\$EXIT	7FFFEDF40	SYSS\$P1_VECTOR	UTIL\$CHK_CLI
SYSS\$FAO	7FFFEDF50	SYSS\$P1_VECTOR	UTIL\$CHK_CLI
SYSS\$FAOL	7FFFEDF58	SYSS\$P1_VECTOR	SOR\$OUTPUT
SYSS\$GETDVIW	7FFFE418	SYSS\$P1_VECTOR	UTIL\$CHK_CLI
SYSS\$GETJPI	7FFFE0D8	SYSS\$P1_VECTOR	SOR\$ENTRY
SYSS\$GETJPIW	7FFFE420	SYSS\$P1_VECTOR	UTIL\$CHK_CLI
SYSS\$GETTIM	7FFFEDF78	SYSS\$P1_VECTOR	SOR\$ENTRY
SYSS\$PUTMSG	7FFFE0E0	SYSS\$P1_VECTOR	SOR\$OUTPUT
SYSS\$QIOW	7FFFEDE00	SYSS\$P1_VECTOR	UTIL\$CHK_CLI
SYSS\$UNWIND	7FFFE070	SYSS\$P1_VECTOR	LIB\$FIXUP_DEC

UTIL\$CHK\_CLI



Value	
000381F0	CLIS_ABSENT
000381F8	CLIS_NEGATED
00038230	CLIS_LOCNEG
0003880A	CLIS_INVQUAL
00038822	CLIS_INVREQTYP
00038832	CLIS_VALCNVERR
0003FD01	CLIS_SPANNED
0003FD19	CLIS_PRESENT
0003FD21	CLIS_DEFAULTED
0003FD29	CLIS_CONCAT
0003FD31	CLIS_LOCPRES
0003FD39	CLIS_COMMA
00158204	LIBS_BADSTA
001C8142	SORS_ROPRAND
7FFEDE00	SYSSQIOW
7FFEDE18	SYSSCLI
7FFEDEB8	SYSSCREMBX
7FFEDECO	SYSSCREPRC
7FFEDEEO	SYSSDASSGN
7FFEDF40	SYSS\$EXIT
7FFEDF50	SYSS\$FAO
7FFEDF58	SYSS\$FAOL
7FFEDF78	SYSS\$GETTIM
7FFEE070	SYSSUNWIND
7FFEE0D8	SYSS\$GETJPI
7FFEE0EO	SYSS\$PUTMSG
7FFEE418	SYSS\$GETDVIW
7FFEE420	SYSS\$GETJPIW
80000010	SYSS\$CALL_HANDL

Key for special characters above:

*	-	Undefined
U	-	Universal
R	-	Relocatable
X	-	External

+-----+  
! Image Synopsis !  
+-----+

Virtual memory allocated: 00000200 000027FF 00002600 (9728. bytes, 19. pages)  
Stack size: 20. pages  
Image header virtual block limits: 1. ( 1. block)  
Image binary virtual block limits: 2. ( 19. blocks)  
Image name and identification: SORTMERGE V04-000  
Number of files: 6.  
Number of modules: 11.  
Number of program sections: 10.  
Number of global symbols: 424.  
Number of cross references: 189.  
Number of image sections: 10.  
User transfer address: 000002B1  
Number of code references to shareable images: 15.  
Image type: EXECUTABLE.  
Map format: FULL WITH CROSS REFERENCE in file \_S255\$DUA28:[SORT32.LIS]SORTMERGE.MAP;1  
Estimated map length: 90. blocks

+-----+  
! Link Run Statistics !  
+-----+

Performance Indicators	Page Faults	CPU Time	Elapsed Time
-----	-----	-----	-----
Command processing:	140	00:00:00.44	00:00:01.10
Pass 1:	167	00:00:01.39	00:00:11.99
Allocation/Relocation:	29	00:00:00.14	00:00:01.48
Pass 2:	55	00:00:00.89	00:00:04.40
Map data after object module synopsis:	23	00:00:00.68	00:00:00.81
Symbol table output:	1	00:00:00.01	00:00:00.55
Total run values:	415	00:00:03.55	00:00:20.33

Using a working set limited to 1200 pages and 84 pages of data storage (excluding image)

Total number object records read (both passes): 379  
of which 176 were in libraries and 0 were DEBUG data records containing 0 bytes

Number of modules extracted explicitly = 5  
with 4 extracted to resolve undefined symbols

26 library searches were for symbols not in the library searched

A total of 0 global symbol table records was written

LINK/USERLIB=PROC/NOTRACE/EXE=EXES: SORTMERGE/MAP=MAPS: SORTMERGE/FULL/CROSS LIBS: SORTMERGE/INCL=(SOR\$ENTRY, SOR\$COMMAND, UTIL\$CHK\_CLI, S  
OR\$OUTPUT, LIB\$FIXUP\_DEC), SYSS\$INPUT/OPTIONS  
EXES: SORT\$HR/SHARE  
PSECT=\$PLITS, PIC, SHR, EXE  
PSECT=\$CODE\$, PIC, SHR  
COLLECT=CODE, \$CODE\$, \$PLITS, SOR\$RO\_CODE, \_LIB\$CODE

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